Black and White • Texture Blending • Focus Stacking • DIY Studio

**GEDigital Photography** 

5

The in-depth quarterly for the photo enthusiast

# **Better Photos**

**Free DVD** 

inside

Macro Focus Stacking Extreme close-up depth of field

digiKam Does it All Open source photo management

# In-depth Workshops



Texture Blending

Give your photos an extra dimension

### Free DVD

eBook, Full Version Software Videos, Sample Images

## **Creative Corner**

Build Your Own Studio Gear Custom home-made equipment

**Fun with Oddball Lenses** Fisheyes, Plastic Optics, Lensbabys

Time travel made simple!

Steam Punk Photo Shoot

# Styling, Location, Creating a Retro Look



**DISPLAY UNTIL FEBRUARY 29** 

# SIGMA

SIGMA LENS for DIGITAL

SIGMA **85** mm **F1.4** EX DG HSM Ler Care, Petal type Hood & Hood Adapter supple



Offering superb optical performance, this lens is among the finest in its class. A medium telephoto lens with a large maximum aperture of F1.4 and compatible with full frame SLR cameras.

The latest optical technology, such as SLD glass elements, ensures high image quality throughout the entire shooting range. This medium telephoto lens is equipped with a large maximum aperture of F1.4 and is compatible with full frame SLR cameras. Delivering beautiful boken, this lens is perfect for portraits and shots at twilight. www.sigma50th.com



We hope you like our steam punk cover shot – it's our take on a fictional past created using very real, high-end digital technology. In fact, what started out as a simple cover shoot turned into a full-blown multimedia project with a life of its own, and the article on page 86 tells you all about how it took shape.

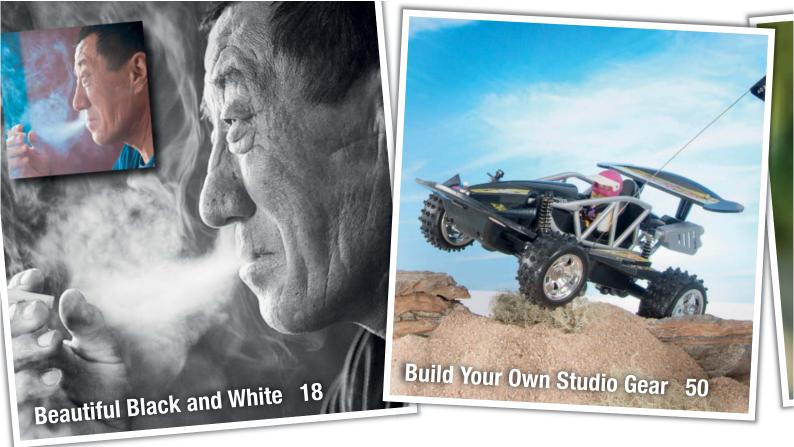
Back in the present, our piece on home-build studio gear gives you practical tips on how to make your own bespoke equipment – and the results are just as good as expensive pro gear at a fraction of the cost. Have you ever found yourself frustrated by the lack of depth of field in your macro shots? Lens experts tell us that there is no way around the laws of optics, but focus stacking gives you an alternative option and enables you to photograph even the smallest insect in perfect focus from wingtip to wingtip. Check out the article on page 76 for details on how.

And for those of you who long for a little discreet light and shade amongst today's intense, all-pervasive colors, our black and white workshop is right up your street. We show you how to find and shoot great monochrome subjects and how to use digital camera and processing technology to get the most out of your digital darkroom.

Have fun exploring our corner of the wonderful world of digital imaging!

Jürgen Ung

Juergen Rink



# Portfolio

André Wagner's fresh take on landscape photography has brought him worldwide recognition. He finds most of his subjects at night and photographs them using very long exposures.

10 André Wagner Portfolio

# **Beautiful Black and White**

An in-depth workshop that explains how to create fascinating monochrome images from your color photos and how to hone your instinct for finding great black-and-white subjects.

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This issue's hands-on camera test covers two 30x optical wide zoom bridge cameras and a ruggedized all-weather ultra-compact.

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# Build Your Own Studio Gear

This multi-part article shows you how to build studio accessories that are just as effective as high-end pro equipment and gives tips on using them to get great results.

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# **Macro Focus Stacking**

In macro situations, even small apertures seldom provide sufficient depth of field – the solution is to shoot multiple images at varying focal distances and merge the results into a single, extended depth-of-field image.

- 78 About Depth of Field
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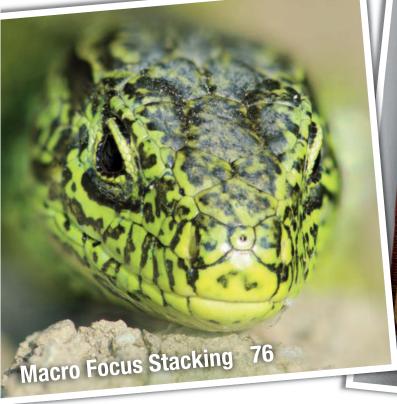
# **Steam Punk Photo Shoot**

The story behind our cover photo and the multimedia project it turned into. This article includes a behind-the-scenes look at the shoot and gives you tips on how to produce and process retro-look photos.

- 86 The Time Travelers' Diary
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# **Texture Blending**

This workshop demonstrates the diversity of texture blending techniques and gives you some ideas for applying the technique to your own photos.

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# Fun Photos with Oddball Lenses

We delve into the wonderful world of shift lenses, Lensbabys and fisheyes, and take an excursion into the outer reaches of pinhole and plastic lens photography.

- 108 Tilt/Shift Lenses
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# digiKam Does it All

We review the key features of the open source digiKam image management tool and show you how to use it to set up your own photo workflow.

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# **Readers' Letters**

# Informative and beautifully made

Thank you for your speedy mailing of issue 4 of your excellent magazine. I discovered it through Ken Rockwell's site. I received today issue 1 of your publication; it is also very informative and beautifully made (pity the manual lens article was only Canon centered – I'm a Nikon user).

At last, I can't resist asking you for a reedition of issue 2, it must be a killer – I would love to get one.

José R. Carneiro

Sorry, but issue #2 is completely sold out.

... and what people are saying about us on the Web:

# A photo magazine worth reading

Let me be blunt: Most photography magazines on the newstands these days suck. Fortunately there are exceptions, one of the most noteworthy of which is c't Digital Photography. The "c't" is an abbreviation of "computertechnik" and is pronounced "C.T." c't is the largest selling tech magazine in Europe and is based in Hannover, Germany. c't Digital Photography magazine is an English translation of computertechnik's quarterly digital photography specials.

Here, in no particular order, is what I like about this magazine:

- Top-quality photos and reproductions
- Plentiful illustrations, many of which cover a full page or two-page spread
- Well-conducted and documented tests of photo equipment and software
- In-depth tutorials on useful techniques and software
- A free DVD that provides additional tutorials and applications

In short, these are photo magazines you could actually learn something from and be inspired by – assuming you're into that sort of thing. I wouldn't wait too long though – Issue 2 has already sold out of its print run.

http://shutterfinger.typepad.com/shutterfing er/2011/09/a-photo-magazine-worthreading.html

Shutterfinger

# Congratulations and thank you

For a great many years now I have been purchasing photographic magzines and books... And then came c't Digital Photography.

To say I was imapacted by this magazine, is a tremendous understatement. \$14.95 is a lot to pay for a magazine normally, but this one was such a breath of fresh air, that I didn't take long to convince myself it was worth it (keep in mind I am Scottish, and spending money is anathema to me).

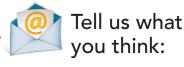
Not only did I decide to purchase the mag at the store, I logged on to my laptop and ordered all the back issues available, which excluded issue 2 as they were out of stock on that.

So what makes this magazine worth all that effort? One, the magazine is physically bigger. The articles are in-depth, technically complete and entertaining. The use of charts, tables and photographs help to illustrate the information being offered. Perhaps the reason the articles and tests are so in-depth and detailed is, this magazine is a quarterly issue. Perhaps because they are not rushing to meet weekly or monthly deadlines, the editorial staff and contributors can take some pride in producing a magazine unlike any other availabile in quality and content, in today's over populated photographic media circus.

I say Congratulations and THANK YOU c't for fulfilling my expectations every issue.

www.clivewatsonphotography.com/?p=69

Clive Watson's Photography Blog



We are always happy to receive your comments and suggestions in a letter, an e-mail to editor@ct-digiphoto.com or at www.facebook.com/ct-digiphoto. We reserve the right to abbreviate your input for publication. Our comments are printed in italics.

### A great magazine for photographers

What I really liked is that every article is deep and detailed. You know how technically oriented I am, and I was pleased to find that magazine editors think the same.

There is plenty of room for long reviews, gear tests and other interesting stuff. HDR, lens reviews (with image examples and 100% crops), HDSLR, etc. What I also like is that they are oriented toward enthusiast and professional photographers, not just a beginners. Truly, I've enjoyed it. As a bonus, every issue comes with a DVD full of images from the tests, software, plugins for Photoshop and other useful stuff.

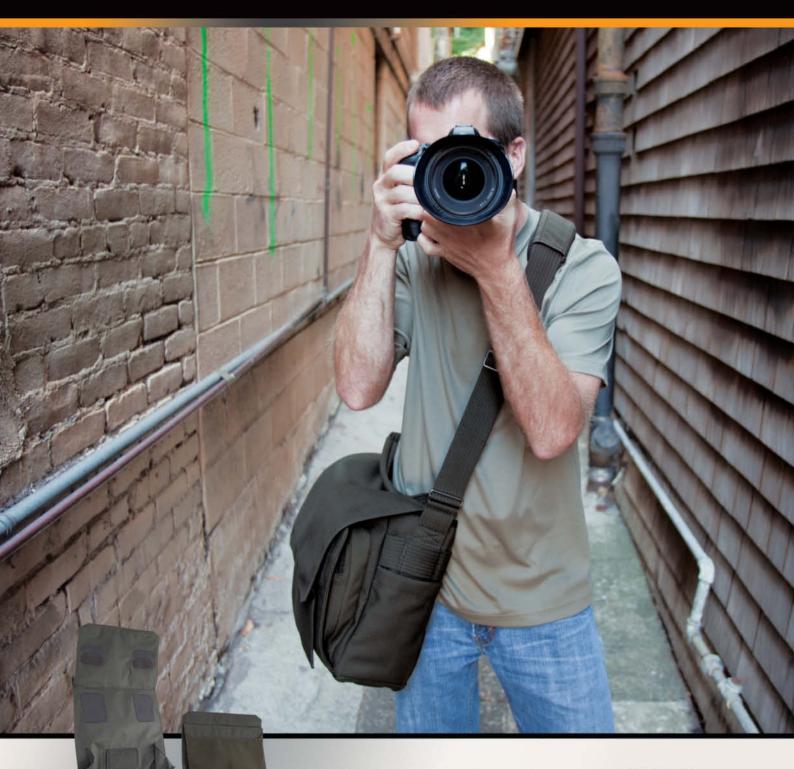
www.akelstudio.com/blog/the-greatmagazine-for-a-photographer-meet-ct-digitalphotography/

AKELstudio, Alex Koloskov



"I took this photo using my charismatic Cambo Ultima view camera, and I hope you've noticed unusual focus in the image: the spread of magazines all in focus, while any other non-flat objects are blurred. This is what happens when you tilt the lens." Alex Koloskov

# When everything feels right



When your gear feels right, your work goes more smoothly. This idea inspired the design of our **Pro Messenger AW series**. Its durable, yet soft exterior is reminiscent of classic canvas, but it's actually a modern performance fabric. It's built to fit pro-sized camera gear in configurations you've told us work best. And it has an innovative flap that effortlessly folds in half to quiet your moves and quicken your pace.



Pro Messenger AW series available in three sizes.

© 2011 DayMen Canada Acquisition ULC

# **DVD** Highlights

Highlights of this issue's free DVD include a complete eBook, sample images from the articles and tests in the magazine and a special offer discount for a full license of the *Helicon Focus* software introduced in our focus stacking article. Our additional free software includes a series of FotoTV.com videos on black and white photography from the early 20th century right up to today.



# Black-and-white Photography Videos

Videos: This set of three videos complements this issue's black-andwhite workshop in a number of fascinating ways.

 $\mathbf{S}$  ometimes pictures tell great stories and sometimes there are stories to tell about great pictures.

In video #1 Graham Howe introduces the fascinating story of E.O. Hoppé, an often neglected photographer who nevertheless achieved worldwide fame at the height of his success in the 1920s. Was he actually the best photographer of the early 20th century? And what happened to his fantastic work? This video provides the answers to these and other fascinating questions.

Our second video describes how a crazy, beer-fuelled idea led to the creation of the largest camera in the world and the correspondingly huge images it captures. Just to give you an idea how crazy the plan was – the camera itself used to be an airplane hangar!

Video #3 gives you a look behind the scenes at the work of Jean-Baptiste Huynh – a photographer who says that digital technology doesn't interest him, but who nevertheless creates highly contemporary monochrome images.

All video material is provided courtesy of FotoTV.com and is part of the site's comprehensive subscriber video library. (jub)



# **Helicon Focus**

Full version: This powerful program creates one completely focused image from several partially focused images by combining the correctly focused areas from each.

# DeblurMyImage

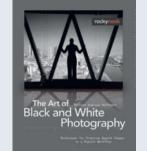
Full version: A great little tool for adding that extra dose of sharpness to nearly perfect photos.

s introduced in our article on Macro A Focus Stacking, Helicon Focus merges multiple images shot with varying planes of focus to produce a single image with increased depth of field. The software is multi-processor-compatible, automatically adjusts and resizes source images and ensures high-quality results through its use of advanced interpolation techniques. It supports a wide range of graphic file formats as well as direct RAW input. The Pro and X64 windows versions of the program also include the Helicon Remote tool, which automates focus and exposure bracketing using a direct tether for all live view DSLRs from Canon and Nikon.

This issue's DVD includes a trial version of the program that you can convert into a fully licensed version (valid until July 1<sup>st</sup> 2012) by following the link in the Focus Stacking Sample Images section of the DVD. *c't Digital Photography* readers are also entitled to an exclusive US\$40 discount on an upgrade to a one-year license or a 20 percent discount on an unlimited Pro license (offer valid until December 31st 2012). (jub) Whether they are painstakingly composed or just simple snapshots, some photos simply aren't sufficiently sharp. This is usually either because the subject moved unexpectedly or because the focus setting used was incorrect. As a result, we decided to include a full version of the small but perfectly formed *DeblurMyImage* 1.6 on this issue's free DVD. This tool has just two functions that are both based on the same four algorithms. These are designed to deblur without amplifying image noise, deblur quickly without using much memory, deblur aggressively and to perform stable, moderate deblurring.

The level of detail, the deblurring method and the strength of the effect can be individually set for both the "out of focus correction" and "motion correction" tools, and both functions include live preview functionality to help you test the effect of different settings.

The software provided on our DVD is a full standalone version that normally retails for  $\in$ 14.99 (about US\$20). A *Photoshop* plug-in version of the program is available from www.adptools.com for the same price. (jub)



# The Art of Black and White Photography

eBook: In contrast to many similar publications, this book by Torsten Andreas Hoffmann emphasizes the whys and wherefores of image composition rather than concentrating on digital image adjustment and enhancement.

The rapid development that digital photography has seen in recent years has spawned many books that describe image processing and digital workflow techniques in detail. Often, the real aim of photography – i.e., to create images that tell stories – gets lost along the way.

In this beautifully illustrated book, Hoffmann gives us an alternative view of the subject of black-and-white photography, dedicating a large part of these 272 pages to describing how to find fascinating photographic subjects and how to compose successful monochrome images around them. He covers various sub-themes, including street and abstract photography, portraiture and architecture, as well as giving us insights into the basic rules of composition, such as the golden ratio and the use of shape.

Additional chapters on choosing the right gear and advanced, *Photoshop*-based digital darkroom technique round out this excellent and thought-provoking work.

The complete current version of the book is included here on DVD. The new, revised print edition is scheduled for release through www.rockynook.com in January 2012. (jub)

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# Photo Tools

AmoK Exif Sorter 2.56 AutoStitch 2.2 CombineZP 1.0 digiKam 2.2.0 Enblend/Enfuse 4.0 EnfuseGUI 2.1 FxifTool 8.66 HD View SL 1.2 Hugin Image Composite Editor 1.4.4 MacPorts Panorama Perfect Lite 1.6.2 PhotoRec 6.12 Picolay 2011-10-06 RawTherapee Sofortbild 1.2.2 Xee 2.2

# **Full Version Software**

DeblurMyImage 1.6 Helicon Focus Pro 5.2.9 (special edition)

# eBook

The Art of Black and White Photography

# **Image Processing Tools**

FDRTools Basic 2.4.0 GIMP GIMP Portable 2.6.11 GREYC's Magic Image Converter (G'MIC) Inkscape Inkscape Portable 0.48.2 PSPI 1.0.7 ShiftN 3.6 SmartCurve 2.2 StylePix 1.8.6.0 StylePix Portable 1.8.6.0

# Videos

The Work of E. O. Hoppé Portrait: Jean-Baptiste Huynh The World's Largest Camera

# Sample Images

Black-and-white Sample Images Camera Test Sample Images Focus Stacking Sample Images



# Portfolio André Wagner

André Wagner's fresh take on landscape photography has brought him a long way. From his modest beginnings in the graffiti scene, he is now based in Berlin and has a reputation that nets him invitations from galleries around the world. We spoke to this single-minded 30-year-old professional about his art, his craft and his business.

André Wagner finds most of his subjects outdoors at night and photographs them using very long exposures. He is a master at taking his time, waiting until the light, the subject and the overall feel of a situation are just right. The results are fascinating photos of windblown trees in New Zealand or mysteriously glowing woods on the Mediterranean island of Majorca.

He consciously resists the urge to take photos all the time, wherever he is, and prefers to concentrate his thoughts on philosophy or mythology and engage with ideas about the elements and terms like fire, wind and creation. The next photographic project emerges when the time is right, be it in India, New Zealand or somewhere closer to home.

These images are a long time in the making, and the processes involved elicit more than just a nod of recognition from viewers. They run counter to the way we are used to seeing things and, if it were not for their enigmatic twilight feel, the nighttime long exposures could almost be taken for daylight shots. Another factor that makes it impossible to overlook these photos is their format: ranging from one to three meters square, these huge LightJet and Dodeka prints really stand out, even in the largest museums or galleries.

Acclaimed by critics and well received by galleries and collectors, Wagner's art scratches a very contemporary itch. The man himself is unwaveringly professional, releasing his largeformat works in limited editions of between three and seven prints and often mounting exhibitions that show just a single series or one particular project. The exact subject matter is decided in close consultation with galleries, and always with potential collectors in mind: What's popular at the moment? What will demand be like in 10, or even 20 years? Many projects are simply shelved until the time is right. Photographers typically clam up when asked about their photographic tricks and techniques. Wagner made an exception for *c't Digital Photography* and gave us a glimpse behind the scenes with the details revealed in his commentary on the images shown on the following pages.

He uses both digital and film cameras – digital for commissioned work and daylight photography and medium-format cameras such as the Mamiya 7 II or 645 Pro for nighttime photography and most of his largeformat pieces.

Analog technology is far superior to digital when it comes to making exposures that can last several hours – and these are not the only extreme lighting situations in which Wagner prefers celluloid to chip. The choice between analog and digital is not a matter of faith, but simply a matter of selecting the method that best allows him to visualize what he has in mind. (jr)

Opening (Berlin, Tempelhof Airport, 2011, from 9.55 to 10.10 a.m., 240 × 140 cm)

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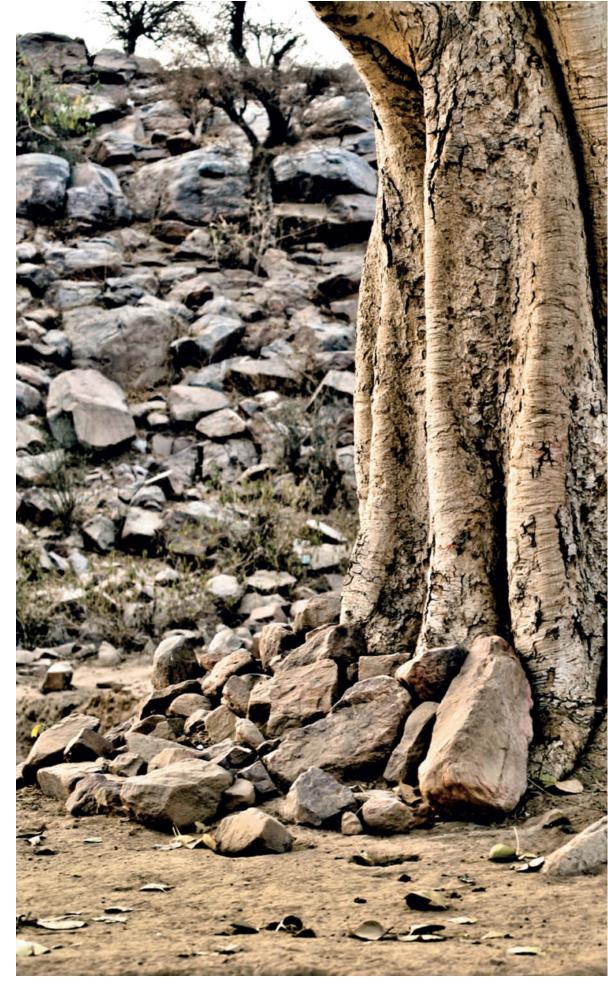
Stor Dier

M.M.N.S. RIMEMANNE

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G

"This photo was taken at the opening of the Bread & Butter clothing trade fair at Tempelhof Airport in Berlin. I exposed the shot from five minutes before until 10 minutes after the gates opened to capture the crowds flooding in." Portfolio | André Wagner



Govardhan (India, 2008,  $100 \times 150 \text{ cm}$ )

"During my travels in India I saw a pilgrim embracing a holy tree on Govardhan Hill. Holy places interest me greatly because they make a special atmosphere visible, like in this photo."





### On the Left Side

(Majorca, 2009, from 10.39 to 10.44 p.m., 140  $\times$  180 cm)

"I find natural scenery in artificial light fascinating. This scene was illuminated by light coming from a tennis court."

### **Dimension Door** (India, 2004, from 4.15 to 4.21 a.m., 135 × 200 cm)

"I wanted to portray fire spreading outwards, like the ripples produced by a stone when it is dropped into water. This location is a dangerous place for tourists after dark, which added to the challenge. We travelled 40 kilometers by motor rickshaw from Vrindavan to Kusum Sarovar. I had been suffering from stomach pains for the previous four weeks and the potholes made the trip almost unbearable. Two friends helped me, with one acting as a security guard and the other, photographer Jens Hocher, helping me to set up the fire effect. Suddenly I realized that there were about 30 locals sitting behind me, watching me very intently – all at four o'clock in the morning."

